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This Amendment is prepared in response to the Office action mailed on 10 September 2007 (Paper No. 20070824).

The abstract has been objected to for the reasons stated on page 2 of the Office Action and by this Amendment, the abstract has been revised so as to overcome this objection.

Claims 1-2 and 7-8 have been rejected under 35 USC 102 as anticipated by Madruga (No. 6,917,985) for the reasons stated on pages 3 and 4 of the Office Action and this rejection is traversed the following reasons:

The present invention generally relates to a method of configuring a direction-based Core Based Tree (CBT) for a CBT-based overlay multicast includes: requesting and receiving an arbitrary terminal node which intends to subscribe to the CBT of information on a child node pre-subscribed to a core node; calculating a direction between the arbitrary terminal node receiving the child node information from the core node and each of the received child nodes, to transmit information to the core node on the child node of the core node having a minimum resultant value along with a subscription request message; receiving the subscription request message transmitted from the terminal node and the child node information from the core node, and comparing a

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resultant direction calculation value of the corresponding child node and terminal node with a resultant direction calculation value between the pre-subscribed child nodes and allowing the terminal node to subscribe to a child node or a parent node of the corresponding child node to configure the CBT in response thereto; and, periodically transmitting and receiving a hello packet between the core node and the terminal node, and among the parent, child and brother nodes so that a state of the corresponding node is confirmed and to reconfigure the configured CBT in response to the confirmed state.

Madruga *et al.* '985 teaches a method of providing multicast routing for use in ad hoc broadcast networks, such as wireless and mobile networks. The method is described within a protocol referred to as core-assisted mesh protocol, or CAMP. The method departs from traditional tree-structured multicast protocols and utilizes multicast meshes in which the network need not be flooded with control or data packets to establish routing paths. Each router configured for CAMP is capable of accepting unique packets arriving from any neighbor in the mesh, wherein packets are forwarded along reverse shortest paths to the receiver. Multiple cores may be defined for a group wherein the loss of a single core does not prevent packet flow. Routers for sender-only hosts are allowed to join the multicast mesh in simplex mode, and in certain cases may join without the sending of a join request.

The present invention teaches a specifically recited method of optimizing the

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configuration of a CBT-based overlay multicast, and a program storage device tangibly embodying a program of instructions for performing a method including calculating directions between various nodes and comparing the calculated directions to optimally select the various nodes.

In rejecting claims 1-2 and 7-8, the Examiner has cited specific portions of Madruga. Unfortunately, the cited portions of Madruga do not correspond to the rejected claims.

For example, the term "child" was only used once in Madruga in discussing a prior art method be compared with the method of Madruga. The terms "terminal node", "parent node", "brother node" and "child node" were not used at all in Madruga.

Since a cited reference must teach each and every recited feature of a claim rejected under 35 USC 102, and since Madruga does not teach or even discuss each and every recited feature of claims 1-2 and 7-8, it is submitted that these claims are patentable over Madruga.

The Examiner has indicated that claims 3-6 and 9-12 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and since, as noted above, claims 1-2 and 7-8 are patentable over

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Madruga, it is submitted that claims 3-6 and 9-12 are also patentable over Madruga.

An additional reference was cited by the Examiner but not utilized in the rejection of the claims and accordingly, no further comment on this reference is necessary.

No other issues remaining, reconsideration and favorable action upon all of the claims now present in the application is respectfully requested. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's undersigned attorney.

No fee is incurred by this Amendment.

Respectfully submitted,

  
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